nexamp

February 12, 2011

Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
Department of Energy Resources
Attn: Commissioner Mark Sylvia
100 Cambridge St., Suite 1020
Boston, MA 02114

Dear Commissioner Sylvia,

The team at Nexamp, Inc., in North Andover would like to thank the Department of Energy Resources (DOER) for their continued leadership and their laudable plan of creating a building energy asset labeling program in Massachusetts as detailed in the DOER white paper published in December, 2010. Nexamp attended the public comment hearing on January 18, 2011 and fully supports the proposed Building Energy Asset Labeling (BEAL) "pilot" program due to the value that such a program, when fully implemented, would have for the Commonwealth.

Nexamp welcomes this additional opportunity to provide written comments on the white paper: *"An MPG Rating for Commercial Buildings: Establishing a Building Energy Asset Labeling Program in Massachusetts".*

I. Stakeholder Introduction

Nexamp has experienced significant growth over the past few years, notably in its Clean Energy Solutions (CES) division. Nexamp CES specializes in designing and implementing energy efficiency solutions for commercial buildings. Explosive growth in this sector is evidence that companies, building owners, and energy managers view energy efficiency as a means to decrease their operating costs, increase budget certainty (in an era of volatile energy prices), and reduce their carbon footprint.

II. Policy Context

The Global Warming Solutions Act, signed into law by Governor Patrick in 2008, requires an 80% reduction in state greenhouse gas (GHG) emissions by 2050 (using 1990 emissions as a baseline). In addition, the 2008 Green Communities Act mandates that the Massachusetts DOER and state electric utilities pursue all cost-effective, energy efficiency measures available. The building sector accounts for over 50% of Massachusetts' total energy consumption; while commercial and industrial buildings consume more than 60% of the state's electricity. Reducing energy use in buildings, therefore, will constitute a critical step towards achieving energy conservation and GHG emission goals. Moreover, the building efficiency and labeling marketplace is expanding rapidly, necessitating a standardized methodology for measuring and comparing energy performance and energy assets in commercial buildings.

A building energy asset rating and labeling program is designed to facilitate a direct comparison of energy performance between similar buildings irrespective of tenant behavior. In contrast to operational ratings, which are based on actual energy use (i.e., energy billing data), asset ratings evaluate the energy performance of a building based on the thermal envelope (i.e., insulation,

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windows) and related mechanical and electrical systems. The goal of energy asset rating is to provide the information necessary to enable the real estate market to evaluate and value the energy performance of a building which should help drive increased investments in energy efficiency. When implemented, these building energy efficiency investments will help the Commonwealth achieve the aforementioned policy goals.

III. Recommendations

Nexamp respectfully submits the following recommendations with regard to the proposed BEAL program in Massachusetts. We believe that the adoption of these recommendations will increase the likelihood of proactive, enthusiastic cooperation by various building owners and of sustained job growth in the market for building energy efficiency solutions in the Commonwealth.

1) **Section 2.1.A**
   Nexamp agrees that a technical scale should be used rather than a statistical scale, with the highest grade/score representing zero net energy performance. This will spur new building construction as well as building retrofits to be as energy efficient as possible, thus driving the Commonwealth closer to its energy goals. This should lead all stakeholders, tenants, building managers, owners, and contractors to take energy efficiency measures into consideration.

2) **Section 2.1.C**
   Nexamp believes that site energy should be used as a primary metric, along with a separate GHG emissions metric, to determine a building's energy use. Nexamp agrees that using the two metrics will provide stakeholders with a "more precise alternative to source energy for the purpose of comparing the emissions profile associated with different buildings."

3) **Section 2.D.3**
   Nexamp believes that if fewer building labeling categories are used, less value may accrue from the building labeling process. Indeed, reducing the number of building categories could lead to misleading or inaccurate categorization of building energy use. Nexamp believes, therefore, that it is very important to identify the appropriate categories for the labeling program, so as not to compromise the value of the building energy asset label itself.

4) **Section 2.3.A**
   Nexamp believes that in the context of promoting a successful building energy asset labeling program, a full, ASHRAE Level 2 audit is an overly time-intensive and costly assessment standard. An ASHRAE Level 2 audit includes preliminary energy use analysis, a walk-through analysis identifying low-cost/no-cost measures, as well as detailed energy calculations based on computer model simulations, and financial analyses of the proposed energy efficiency measures. As such, cost estimates for an ASHRAE Level 2 audit in a 300,000 square foot commercial office building range from $7,000 - $15,000.

   Nexamp suggests that the requirement for an ASHRAE Level 2 audit be revised so as to reduce the challenges that these very detailed audits present for all stakeholders and potentially speed the payback of the measures implemented. For example, keeping only the core elements of an ASHRAE Level 2 audit (while omitting the computer modeling and/or financial analysis requirements) could speed the process of benchmarking as well as greatly reduce the overall assessment costs.

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5) **Section 2.3.B**

Nexamp agrees that a standardized method of data collection should be developed in collaboration with appropriate, national stakeholders. Nexamp suggests that the data collection process be designed so as not to be overly time-consuming or onerous (i.e., were it to require copious design documents, etc.). Complete design documents (or even "as-built" retrofit plans), for example, are rarely available due to the fact that commercial buildings in Massachusetts tend to be older and have often been repurposed.

6) **Section 2.3.D.1**

Nexamp agrees that quality assurance is critical to the credibility and ultimate success of a labeling program intended to increase energy efficiency investments in commercial buildings. Furthermore, we believe that Certified Energy Managers (CEMs), certified by the Association of Energy Engineers (AEE), are well-qualified to perform said commercial building assessments. Currently, there are over 300 CEMs in the Commonwealth. Therefore, the time and costs required to ensure high-quality building assessments as part of the program could be minimized using this existing and well-respected energy industry certification.

7) **Section 2.3.E**

Nexamp agrees that a compelling value proposition is needed in order to drive interest and building owners to participate in the BEAL program. Nexamp believes this could best be structured as some form of government incentive or utility rebate for the initial building labeling assessment. Regardless of the details, this type of reimbursement mechanism will be vital to getting the labeling program off the ground, particularly if the labeling program begins on a voluntary basis. On this point, Nexamp suggests not only that the BEAL process should be voluntary, but also that any rebate/incentive component be designed to be phased out over time.

Example: Voluntary BEAL Rebate Schedule

Year	Rebate Percentage
1	100 %
2	75 %
3	50 %
4	25 %

Finally, Nexamp believes that commercial building owners should be given the option to exercise a "right to privacy" regarding their BEAL score(s). A privacy guarantee, especially in the first year of BEAL implementation, will incentivize owners to establish a baseline of building energy consumption from which to guide future investment decisions in energy efficiency upgrades.

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IV. Summary

Nexamp would like to thank the Department of Energy Resources for the opportunity to share our comments on the proposed building labeling initiative. Nexamp enthusiastically supports the BEAL program and we aim to be closely involved in its development and deployment. Given the skills and experience of our staff in the provision of clean energy solutions, Nexamp hopes to make many meaningful contributions to the development and pilot phase of this program. As desired, we would be happy to provide additional technical insight and recommendations for process improvement as the pilot BEAL program is rolled-out.

Based on past experience, Nexamp is confident that the DOER will incorporate these recommendations, along with those of other industry experts, in a manner that will stimulate the growth of the building energy efficiency market which will ensure continued job growth and reduce building energy consumption as well as associated carbon emissions in Massachusetts. If you have additional questions, please do not hesitate to contact Elijah Ercolino, Energy Engineer, at (978) 688-2700, ext. 734 or eercolino@nexamp.com. Once again, thank you for your continued leadership in this important area.

Sincerely,

Stuart R. Patterson
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